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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,199	06/27/2001	John J. Williams JR.	97406	7079
26327	7590	03/22/2006	EXAMINER	
THE LAW OFFICE OF KIRK D. WILLIAMS 1234 S. OGDEN ST. DENVER, CO 80210			LY, ANH VU H	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/894,199	<b>Applicant(s)</b> WILLIAMS ET AL.	
	<b>Examiner</b> Anh-Vu H. Ly	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8,10-14 and 18-46 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 and 42-46 is/are allowed.
- 6) ☒ Claim(s) 1,5-7,18,22-24,26,30-32,34 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 2-4,8,19-21,25,27-29,33,35-37 and 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. This communication is in response to applicant's amendment filed December 27, 2005.

Claims 1-8, 10-14, and 18-46 are pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 18, 26, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Frazier et al (US RE38, 309 E).

With respect to claims 1, 18, 26, 34, Frazier discloses receiving a start flow control signal and receiving a stop flow control signal (col. 5, lines 47-49 discloses that flow control transmit on/off ("XON/XOFF") messages are transmitted by a receiving station that is about to be congested, across the physical layer to the transmitting station whose data output is to be controlled). Frazier discloses determining a time difference between the receipt of the start flow control signal and the stop flow control signal and determining an initiate rate based at least in part on the determined difference (col. 8, lines 1-3 discloses that upon receiving such as XOFF message, a DTE must first receive an XON message before it is allowed to transmit. This

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implies that during the time period or time difference of XOFF and XON, no data is allowed to transmit, then the rate is zero, the data is only allowed to transmit at a rate or at an initial rate other than rate of zero only after receiving the XON message); wherein the timing difference is a measured time duration (col. 8, lines 1-3 discloses that upon receiving such as XOFF message, a DTE must first receive an XON message before it is allowed to transmit. Herein, the waiting period for receiving an XON message is a measured time duration between the XOFF message and XON message).

3. Claims 1, 18, 26, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Donoghue (US Patent No. 6,882,622 B1).

With respect to claims 1, 18, 26, 34, Donoghue discloses receiving a start flow control signal and receiving a stop flow control signal (col. 5, lines 30-33 and Fig. 5 discloses that a transition between XON and XOFF represents the sending of an XOFF control frame and the reverse transition represents the sending of an XON control frame). Donoghue discloses determining a time difference between the receipt of the start flow control signal and the stop flow control signal and wherein the timing difference is a measured time duration (Fig. 5 discloses that the XOFF frame is sent when the occupancy of the memory space exceeds the high watermark, as shown by curve 50 at time  $t_1$  and XON is sent when occupancy falls below low watermark, as shown by curve 50 at time  $t_4$ , there is a time difference between the receipt of the start flow control signal and the stop flow control signal. Further,  $t_4 - t_1$  is a measured time duration). Donoghue discloses determining an initiate rate based at least in part on the determined difference (col. 6, lines 1-5 discloses that at time  $t_5$ , the source can transmit intermittently at the reduced data rate or initial rate). Donoghue discloses a rate controller and a

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timing mechanism (col. 4, lines 25-28 discloses that typically a source will include a timer which is set on receiving a pause frame and the source may recommence transmission of packets, or a rate controller, when the time value reaches zero).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7, 22-24, 30-32, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier et al (US RE38, 309 E) in view of Tokura et al (US Patent No. 5,400,329).

With respect to claims 5-7, 22-24, 30-32, and 38-40, Frazier discloses a full duplex flow control for Ethernet networks (Fig. 4). Frazier does not disclose increasing the current rate and/or doubling a value of the current rate after setting the current rate to initial rate and comparing the current rate to a maximum rate and setting the current rate to the maximum rate. Tokura discloses exponential increasing the current rate or initial rate after initializing time period  $t_0$ , comparing and setting current rate to the maximum rate at T (Fig. 6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of increasing the current rate in Frazier's system, as suggested by Tokura to maximize system capacity.

***Allowable Subject Matter***

5. Claims 2-4, 8, 19-21, 25, 27-29, 33, 35-37, and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 10-14 and 42-46 are allowed.

***Response to Arguments***

7. Applicant's arguments filed December 27, 2005 have been fully considered but they are not persuasive.

Applicant argues in page 10 that the prior art does not teach or suggest determining the time duration between occurrence of these recited two events rather these references merely rely on what state they are currently in.

Examiner respectfully disagrees. First of all, Frazier discloses (col. 8, lines 1-3) that upon receiving such as XOFF message, a DTE must first receive an XON message before it is allowed to transmit. Herein, the waiting period for receiving an XON message is a measured time duration between the XOFF message and XON message as a function of time. Therefore, Frazier discloses the argued claimed limitation.

Secondly, Donoghue discloses in Fig. 5 that the XOFF frame is sent when the occupancy of the memory space exceeds the high watermark, as shown by curve 50 at time t1 and XON is sent when occupancy falls below low watermark, as shown by curve 50 at time t4, there is a time difference between the receipt of the start flow control signal and the stop flow control signal. Herein, t4-t1 is a measured time duration. Therefore, Donoghue also discloses the argued claimed limitation.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

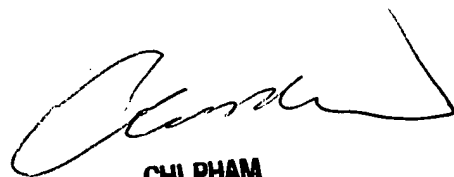
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/20/06